

# Digitizing and Preserving Rare Images of Pathological Disorders of Grain Sorghum





Great Plains Diagnostic Network - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Address http://www.gpdn.org/DesktopDefault.aspx Go Y!

# GPDN Great Plains Diagnostic Network

Portal Home Portal Documentation

Send us your feedback!

## NPDN Web Ring

- NPDN
- GPDN
- NEPDN
- NCPDN
- SPDN
- WPDN

## GPDN Portal

Home

## Login Panel

- < PDIS Login
- < GPDN Login

## Image Library

- Image Search
- Use Statement

## AgAlerts

- Overview
- Active AgAlerts
- Search AgAlerts
- Login/ Subscribe

## News

### Great Plains Network Members: Diagnostic Labs for Plant Problems

**Colorado State University**  
Bioagricultural Sciences & Pest Management  
<http://www.colostate.edu/Depts/bspm/> E215 Plant Sciences Building Colorado State University Fort Collins, CO 80523-1177

**South Dakota State University**  
Plant Science Department  
<http://plantsci.sdstate.edu> Box 2108, PSB 113 - Jackrabbit Drive Plant Science Department South Dakota State University Brookings, SD 57007-1090

**Oklahoma State University**  
Entomology & Plant Pathology  
<http://entopl.okstate.edu/> 127 Noble Research Center (127 NRC) Oklahoma State University Stillwater, OK 74078-3033

**North Dakota State University**  
Plant Pathology <http://www.ndsu.nodak.edu/plantpath/> Dept. of Plant Pathology PO Box 5012 North Dakota State University Fargo, ND 58105  
Entomology <http://www.ndsu.nodak.edu/entomology/> 202 Hultz Fargo, ND 58105

**Texas Tech University**  
Texas Agricultural Experiment Station in cooperation with Texas Tech University Texas High Plains Plant Pathology  
<http://amarillo.tamu.edu/programs/plantpath/> 6500 Amarillo Blvd W., Amarillo, TX 79106


**University of Wyoming**  
Plant Science  
<http://www.uwyo.edu/plants/default.htm> Department 3354, University of Wyoming 1000 E. University Ave. Laramie, WY 82071

**University of Nebraska- Lincoln**  
Plant Pathology <http://plantpath.unl.edu/> Southeast Research & Extension Center 448 PS University of Nebraska Lincoln, Ne 68583-0722  
Entomology <http://entomology.unl.edu/> 202 Plant Industry Bldg University of Nebraska-Lincoln Lincoln, NE 68583-0816


**Montana State University**  
Plant Science/Plant Pathology <http://plantsciences.montana.edu/> 119 AgBioScience, Montana State University, Bozeman, MT 59717  
Animal and Range Sciences <http://animalrange.montana.edu/>  
Montana State University, PO Box 172900, Bozeman, MT 59717-2900

**Kansas State University**  
Plant Pathology <http://www.oznet.k-state.edu/plantpath/> Dept of Plant Pathology 4024 Throckmorton Plant Science Center, KSU Manhattan, KS 66506-5502  
Entomology <http://www.oznet.k-state.edu/entomology/> 123 W. Waters Hall, Kansas State University, Manhattan KS 66506-4004

## News Images




Astri Wayadande, Instructor at Insect Vector Workshop




Mottle  
Notch


citrus greening (image: FL Div of Plant Industry)



citrus greening (image: FL Division of Plant Industry)



# PDIS – Plant Diagnostic Information System [www.pdis.org](http://www.pdis.org)



## Plant Diagnostic Information System

**NPDN Web Ring**

- [< NPDN](#)
- [GPDN](#)
- [NEPDN](#)
- [NCPDN](#)
- [SPDN](#)
- [WPDN](#)

**Main Menu**

- [< PDIS Home](#)
- [< PDIS Login](#)

**Image Library**

- [Image Search](#)
- [Submit Image](#)
- [Use Statement](#)

**AgAlerts**


- [Overview](#)
- [Active AgAlerts](#)
- [Search AgAlerts](#)
- [Login/Subscribe](#)

**PDIS Information**

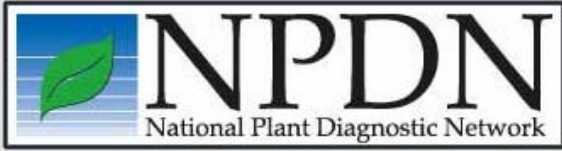

- [Overview](#)
- [Contacts](#)
- [Equipment](#)
- [Software](#)

The Plant Diagnostics Information System has been developed to facilitate plant diagnostic lab activities for a consortium of land grant institutions, state departments of agriculture and the U.S. Department of Agriculture. These labs provide services for plant disease diagnosis, plant identification, and insect identification. PDIS is a system of web and database applications designed to facilitate recordkeeping and communication needs of lab personnel and their customers.

**SEARCH ?**



Armyworm(*Pseudaletia unipuncta*) Tachinid Fly Eggs (*Archytas analis*)



Plant Diagnostic Information System Version:3.2.2458.18424  
© 2003-2004 Kansas State University Research and Extension  
[PDIS Image Library Search Engine Links](#)

# Dr. Larry Claflin

- International expert in grain sorghum
- Over several decades he traveled the world taking pictures of grain sorghum diseases
- He has thousands of slides of grain sorghum diseases
- He wants his slides to be preserved, viewed and used by other people after he retires

# Benefits

- Important images are preserved in a digital format
- Allows others to view images for educational, informational, or research purposes
- A significant food security resource for researchers
- Creates a protocol for uploading images and metadata that could be used for other similar projects

# Protocol – Five Steps

- Image selection
- Metadata
- Digitization
- Verification
- Evaluation of procedures



# Image selection – Dr. Claflin



# Metadata – Dr. Claflin

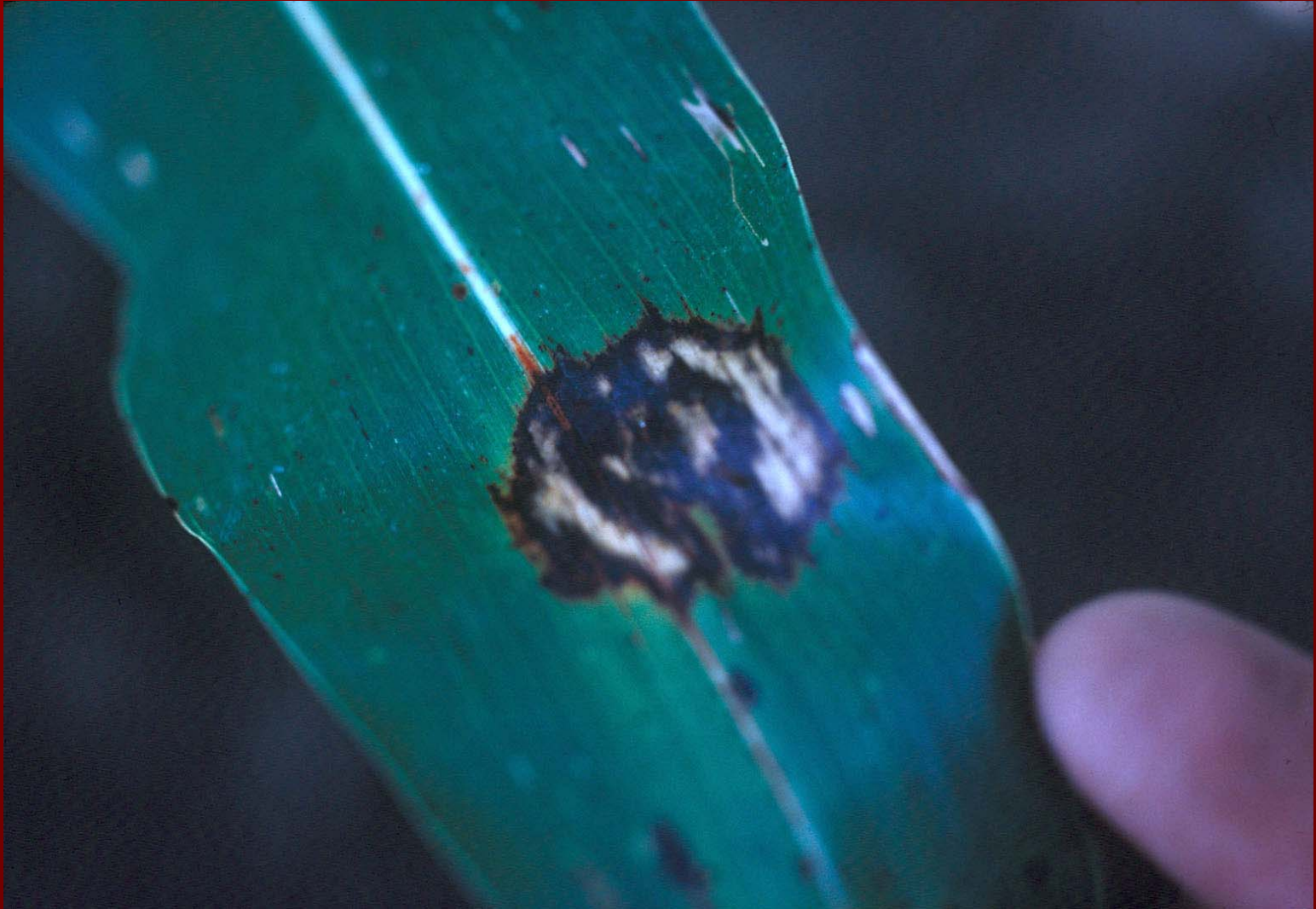
- Corresponds to PDIS metadata fields
- Location – Country, state, county
- Photographer and institution
- Date
- Taxonomic & common names of host and disease/pest
- Keywords
- Description of image
- Additional resources – Not used for this project
- Image



# Digitization - Scanning



# Digitization - Correction



# Digitization – Submitting Images

Diagnostician Administration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <https://intranet1.pdis.org/ImageLibrary/Submit2D.uplx> Go Links »

**KSTATE** RESEARCH AND EXTENSION  
Kansas State University

**Main Menu**

- PDIS Public
- < PDIS Homepage
- My Account
- My Support
- Logout
- Help

**Secure Comm**

- New Message
- Unread (0)
- Read (0)
- Draft (0)
- Sent (0)

**NPONExercises**

- View Exercises

**Image Library**

- Image Search
- Submit 2D Image
- Submit 3D Image
- Submit Version
- Rejected Images(30)

**Agricultural Alerts**

- Overview
- Active AgAlerts
- Search AgAlerts
- Login/Subscribe

## Image Library Submission

This form is used to submit and classify images to the image library for peer review. When the image is reviewed and approved or rejected, you will receive email notification.

### Image Library Submission

LOCATION PHOTOGRAPH WAS TAKEN

Images are searchable by geographical region. To the best of your ability specify the country, state and county (province) where the photograph was taken. **HINT:** If the country, state or county are unknown, select "Unknown" from the dropdown list box. **HINT:** To quickly navigate the list boxes select a list box and type in the first letter of the option you are looking for.

Country:

State:

County:

PHOTOGRAPHIC CREDIT

Select the institution that deserves the credit for submitting this image. The institution that you select will determine the copyright notice that is placed on the bottom of the image. Images are also searchable by institution. The institution that you select also determines the peer review queue in which the image will be placed.

Institution:

Photographer:

Copyright:

IMAGE SEARCH METADATA

Users will most often use the following fields for finding images. If there is an insect on a leaf that causes a visible disease, consider that a user may want to find the image by searching by insect, host, or disease or any combination thereof.

Date Taken:

Common Name PEST:

Taxonomic Name PEST:

Common Name HOST:

Taxonomic Name HOST:

Keywords About photographic subject:

Photo Description:



Keyword List

Start Removable Disk (E:) Microsoft PowerPoint - [...] Diagnostician Admini...

Internet 2:28 PM



# Verification – Accepted/Rejected



**Main Menu**

- < PDIS Home
- < PDIS Login

**Image Library**





- [Image Search](#)
- [Submit Image](#)
- [Use Statement](#)


## Image Details

Status: **Accepted**

Dimensions: 1556 x 1139 pixels

Download:



Host/Plant: Sorghum, milo (*Sorghum bicolor*)  
Pest/Path: Zonate Leaf Spot (*Gloeocercospora sorghi*)  
Description: Corpus Christi, Texas: Zonate is common during wet periods.

Institution: [Kansas State University](#)  
Photographer: [Larry Claflin](#)  
Location: [Nueces, Texas, United States](#)  
Date Taken: 6/1/1982  
Submitted: [livia@ksu.edu](mailto:livia@ksu.edu) 5/31/2005

**Image Use Statement** (A) Images may be used without written permission by K-12 or higher education faculty and students in web pages, presentations and homework assignments. (B) Images may be used without written permission by United States federal, state and local governments in web pages, and presentations. (C) Image use not covered by above provisions may require written permission from the copyright holder and may require payment of royalties. (D) Use of images must be accompanied by photographer credit and copyright notice.

Great Plains Diagnostic Network  
Plant Diagnostic Information System Version: 3.2.2458.18424  
© Copyright Kansas State University Research and Extension All Rights Reserved



*Sorghum, Milo (Sorghum bicolor)*  
Zonate Leaf Spot (*Gloeocercospora sorghi*)  
Photo By: Larry Claflin 8/15/2005 ID: 38228  
Kansas State University  
Great Plains Diagnostic Network  
(c) Copyright 2005



# Evaluation of Procedures

- Extra details added once the process was started
- Directions created for scanning & correcting of images, and for uploading of images to PDIS
- Worked with people at the PDIS to sort out any problems